



One Laptop Per Child

What's the fuss all about?

Presented by
Caryl Bigenho, OLPC Support Volunteer
CUE 2009 Palm Springs, CA
March 4, 2009

A photograph of a classroom in Nicaragua. Numerous students, mostly of Hispanic descent, are seated at wooden desks. They are using small, green-framed laptops. The students are wearing white shirts, likely school uniforms. In the background, a teacher or adult is standing and interacting with the students. The classroom has a green chalkboard and wooden floors. The overall atmosphere is one of active learning and technology integration in an educational setting.

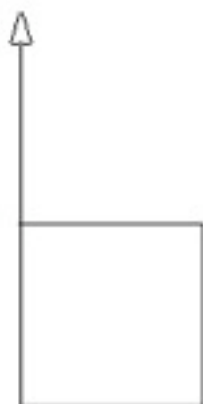
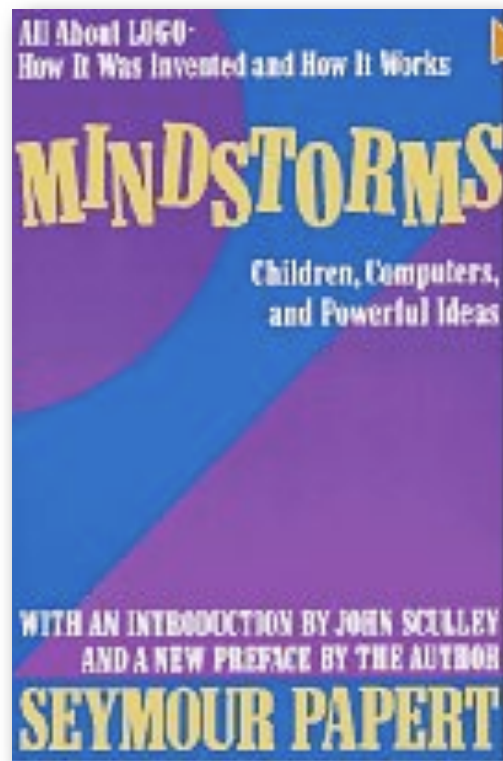
IAEP

It's An Education Project!

Nicaragua

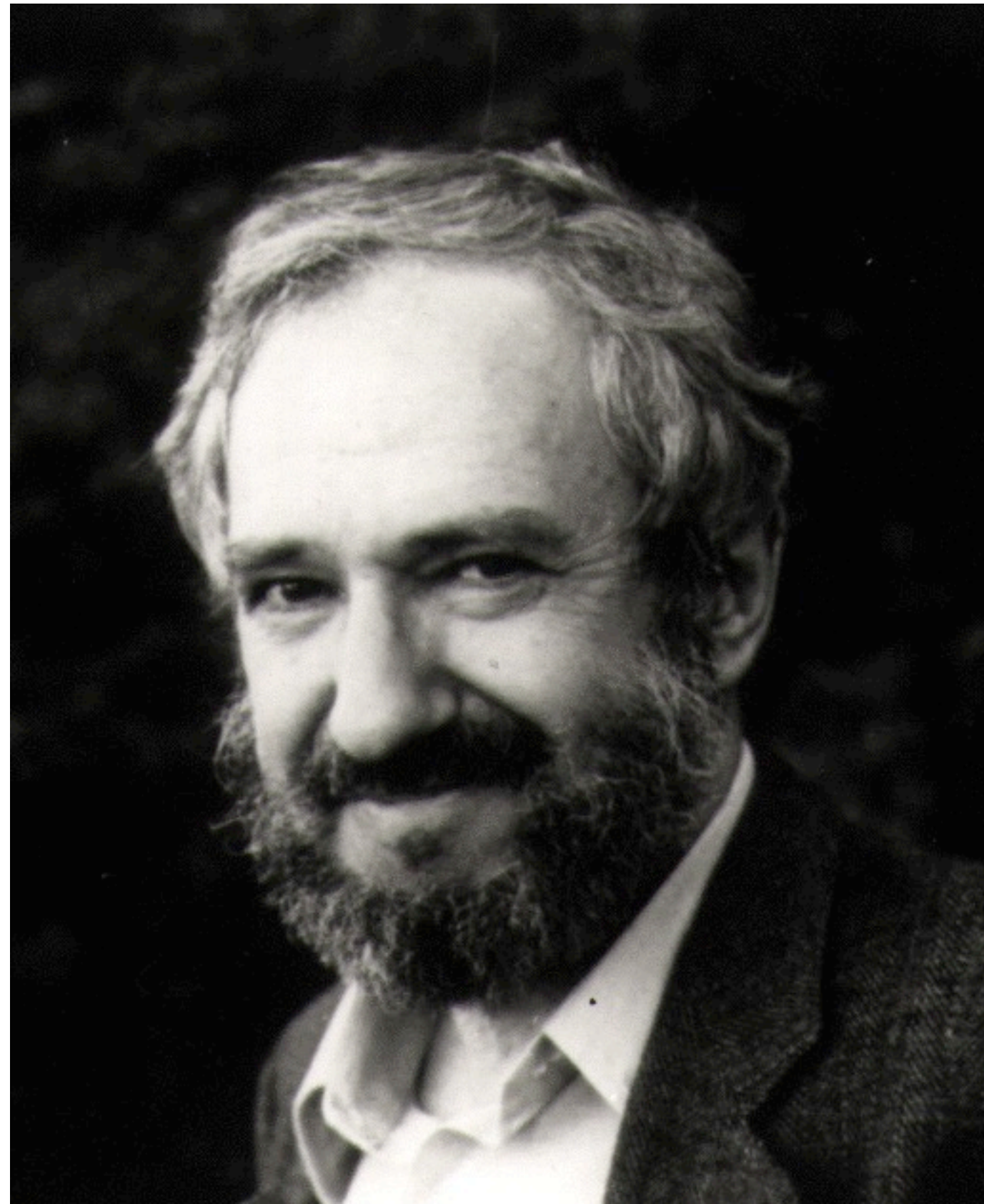
Origins At MIT

- Seymour Papert

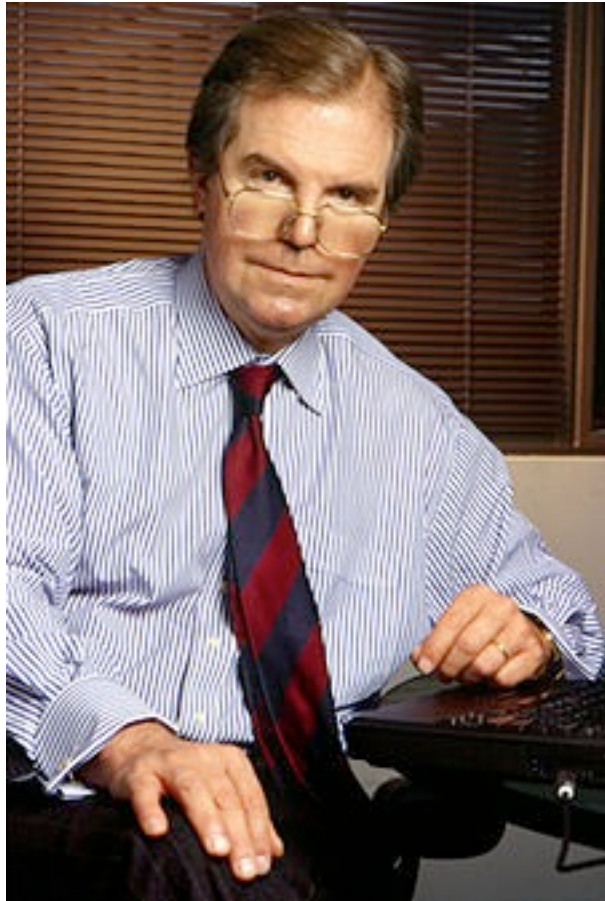


```
Welcome to Berkeley Logo version 5.5
? right 90
? forward 100
? right 90
? forward 100
? right 90
? forward 100
? right 90
? forward 100
? forward 100
? □
```

Remember LOGO?



MIT Media Lab



Nicolas Negroponte



Alan Kay



Mary Lou Jepsen



Announcing OLPC

Project Ceibal Uruguay

202,000+ laptops





Gyr or Yurt



Mongolia 10,100+ Laptops



A Privately Funded XO Deployment in the Caribbean Area



Immokalee, FL



St. John, VI



Nicaragua



Haiti



St. Vincent

Some Other Deployments



Afghanistan 11,000+
(Partner Country)



Nepal 6000
(Grassroots Deployment)



Ethiopia 5000
(Partner Country)



Ghana 1000
(Partner Country)

Deployment Summary (I)

	XOs delivered, shipped and ordered	Language	Keyboard	Software release	School server status
OLPC Uruguay	202,000	Spanish	OLPC Spanish Keyboard	7.1.2 (656)	
OLPC Peru	145,000	Spanish		8.1.0 (703) 8.1.1 (708)	
OLPC G1G1	72,000	English	OLPC English Keyboard	7.1.0 (650) 7.1.2 (656)	none
OLPC Mexico	50,000	Spanish			
OLPC Birmingham	14,000	English	OLPC English Keyboard		0.4
OLPC Haiti	13,000	Kreyol	OLPC French Keyboard	7.1.2 (656) 8.1.0 (703)	none
One Laptop Per Child Afghanistan	11,000	Dari Pashto	OLPC Pashto Keyboard	8.2.0 (767)	none
OLPC Mongolia	10,100	Mongolian	OLPC Mongolian Keyboard	8.2.0 (767)	
OLPC Rwanda	10,000	English	OLPC English Keyboard	8.1.1 (708)	
OLPC Nepal	6,000	Nepali	OLPC Nepali Keyboard	8.1.0 (703)	0.3
OLPC Oceania	5,000		OLPC English Keyboard	Candidate	0.4

Deployment Summary (2)

	XOs delivered, shipped and ordered	Language	Keyboard	Software release	School server status
OLPC Ethiopia	5,000	Amharic	OLPC Amharic Keyboard	8.1.1 (708)	none
OLPC Paraguay	4,000	Spanish	OLPC Spanish Keyboard	8.2.1	
OLPC Cambodia	3,200	Khmer	OLPC Khmer Keyboard		
OLPC Guatemala	3,000	Spanish	OLPC Spanish Keyboard	8.2.0 (767)	none
OLPC Colombia	2,600	Spanish	OLPC Spanish Keyboard	8.1.0 (703)	0.4
OLPC Brazil	2,600	Brazilian Portuguese			
OLPC Lebanon	2,000	Arabic	OLPC Arabic Keyboard	7.1.2 (656)	
OLPC Ghana	1,000	English	OLPC English Keyboard	7.1.2 (656)	0.3
OLPC South Africa	650	English	OLPC English Keyboard		
OLPC Thailand	505	Thai	OLPC Thai Keyboard		
OLPC India	505	English Hindi Bengali	OLPC Devanagari Keyboard	7.1.2 (656)	

Deployment Summary (3)

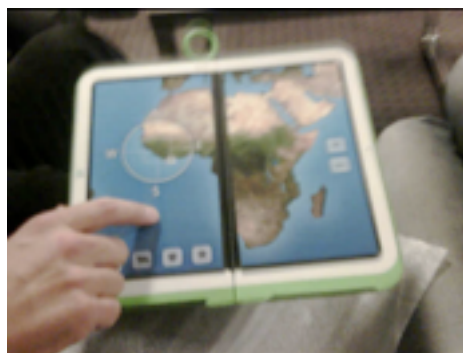
	 XO's delivered, shipped and ordered	 Language	 Keyboard	 Software release	 School server status
OLPC Niue	500	English	OLPC English Keyboard	8.1.0 (703)	0.4
OLPC Iraq	400	Arabic	OLPC Arabic Keyboard		
OLPC Mozambique	200	Brazilian Portuguese	OLPC Portuguese Keyboard	8.1.0 (703)	
OLPC Nigeria/Jimeta	100	English	OLPC English Keyboard		none
OLPC Friends	80	English	OLPC English Keyboard	8.2.0 (767)	0.4
OLPC Mali	30	French	OLPC English Keyboard		

Meet The XO

Today's XO



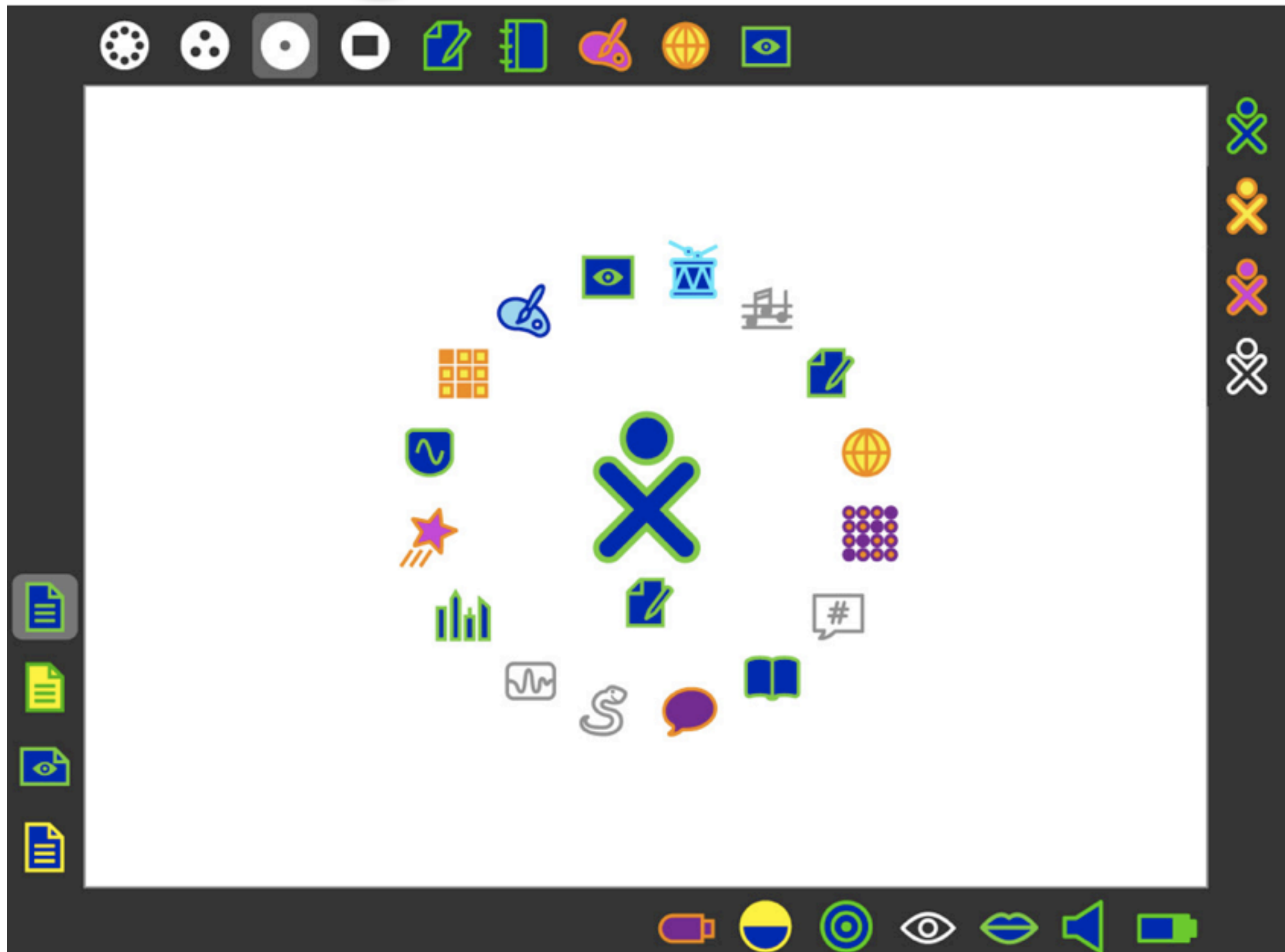
Some Prototypes



The Future?



Sugar Software



137 Activities !

- General Search and Discovery (5)
- Documents (Read, Write, and Share) (7)
- Feeds : News and more (1)
- Chat, Mail, and Talk (4)
- Drawing & Media creation/editing (14)
- Programming (13)
- Math & Science (18)
- Maps and Geography (4)
- Media, Audio & Video Players (3)
- Games (47)
- Teacher and New User Tools (5)
- Other (16)

<http://wiki.laptop.org/go/Activities/All>

Write Activity

B *I* U  |  19  DejaVu Sans  

Activity | Edit | Text | Image | Table | Format | View

Sharks



by Nittaya, Jaruan, Yupin, Viroj

In some form, sharks have been around for about 400 million years. Even before dinosaurs roamed the earth, sharks hunted through the oceans! They're such good survivors that they've had little need to evolve in the last 150 million years. These ancient predators fascinate adults and children alike. Sharks have the most powerful jaws on the planet. Unlike most animals' jaws, both the sharks' upper and lower jaws move.



A shark bites with its lower jaw first and then its upper. It tosses its head back and forth to tear loose a piece of meat which it swallows whole. Each type of shark has a different shaped tooth depending on their diet. (The shark in the photo is a great white—you can tell he's a carnivore just by looking at those sharp, pointy teeth!)

A shark may grow and use over 20,000 teeth in its lifetime! Sharks never run out of teeth. If one is lost, another spins forward from the rows and rows of backup teeth. Normally, sharks eat alone. But sometimes one feeding shark attracts others. They swim up as quickly as possible and all begin to try to get a piece of the prey. They bite wildly at anything that gets in their way—even each other.

The great white shark rarely partakes in feeding frenzies. Almost all sharks are “carnivores” or meat eaters. They live on a diet of fish and sea mammals (like dolphins and seals) and even such prey as turtles and seagulls. Sharks even eat other sharks. For example, a tiger shark might eat a bull shark, a bull shark might eat a blacktip shark and a blacktip shark might eat a dogfish shark!

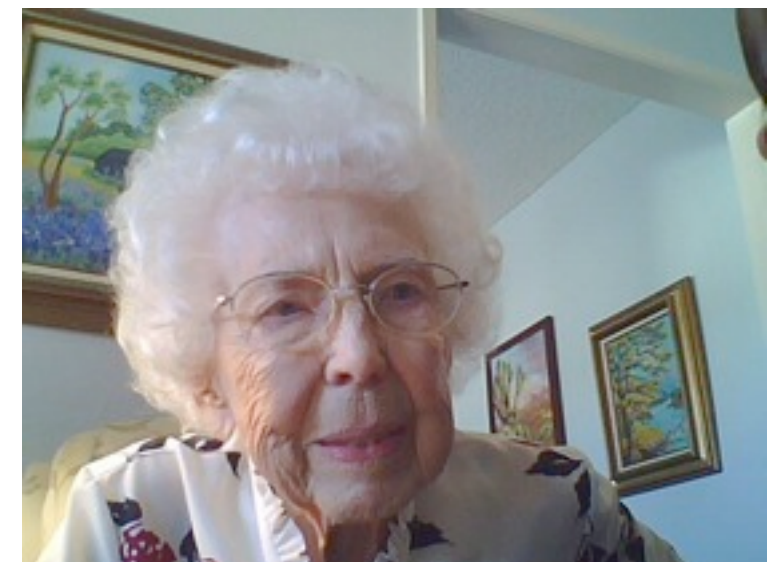
Record Activity



9-months-old



9-years-old



92-years-old

Tam Tam Suite



TamTamJam
The Play Tab

Click here to start/stop the drum beat

Adjust the balance between the drum beat and the keyboard sound(s)

Adjust the amount of reverberation on the sounds

Select to show sounds in a given category (all, animals, objects, electronic, keyboards, humans, percussions, strings and winds)

Adjust tempo of drum beat loop

Adjust length of drum beat loop

Adjust complexity of drum beat loop

Click to generate a different drum beat

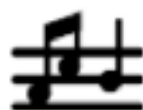
Click to select one of five drum/percussion kits

Adjust overall volume

Click on any sound icon to select it and play it on the XO keyboard



TamTamMini

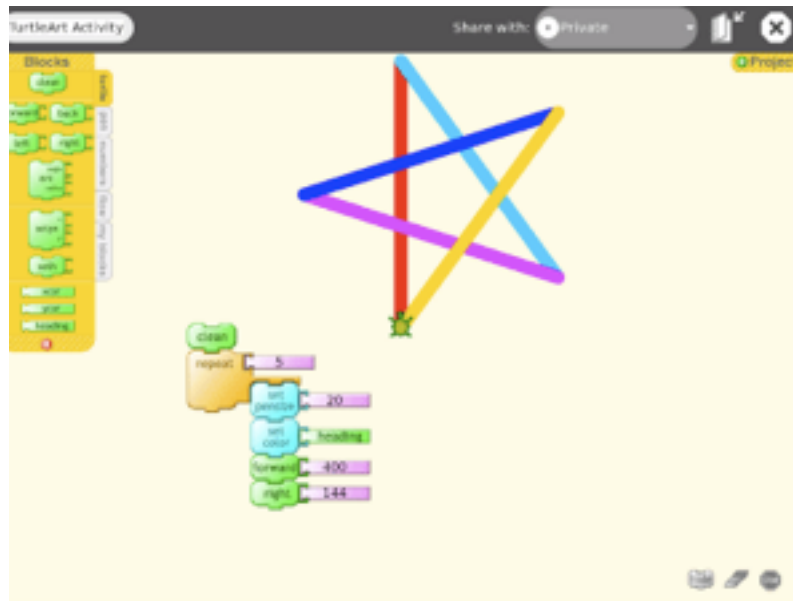


TamTamEdit

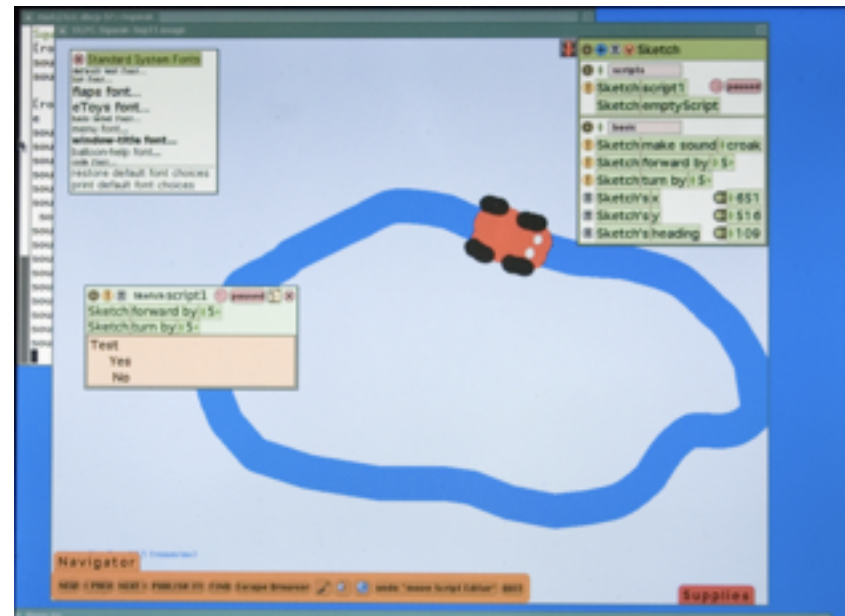


synthLab

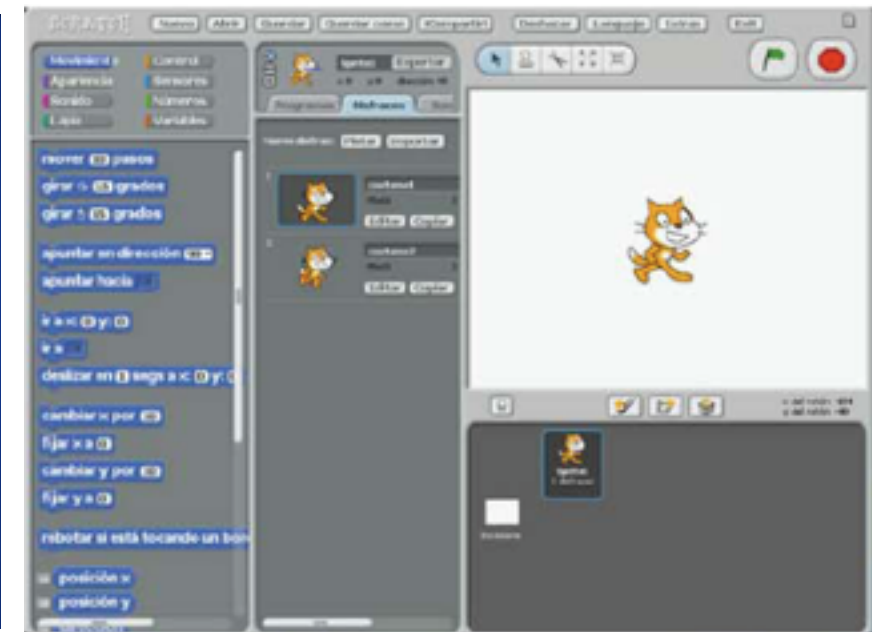
Programming for Kids



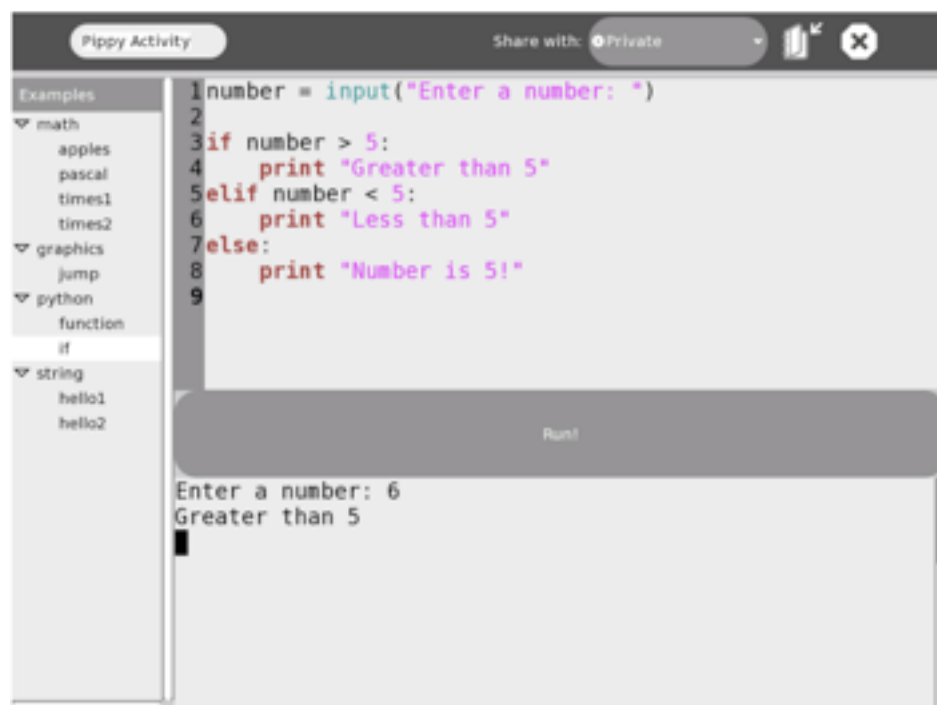
- Turtle Art



- EToys



- Scratch

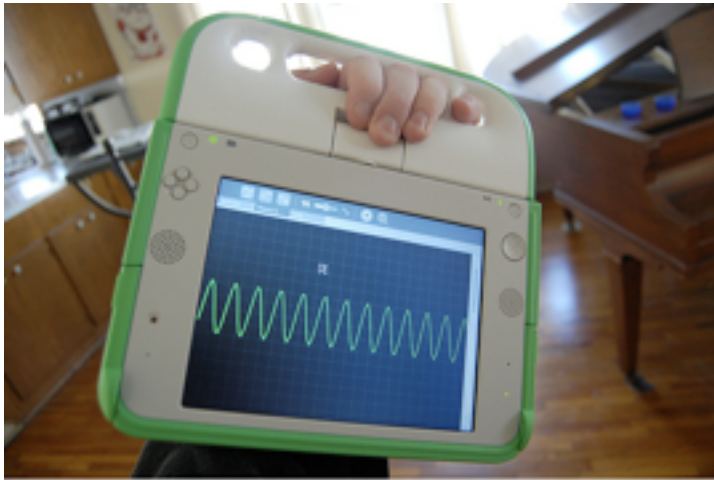


- Pippy

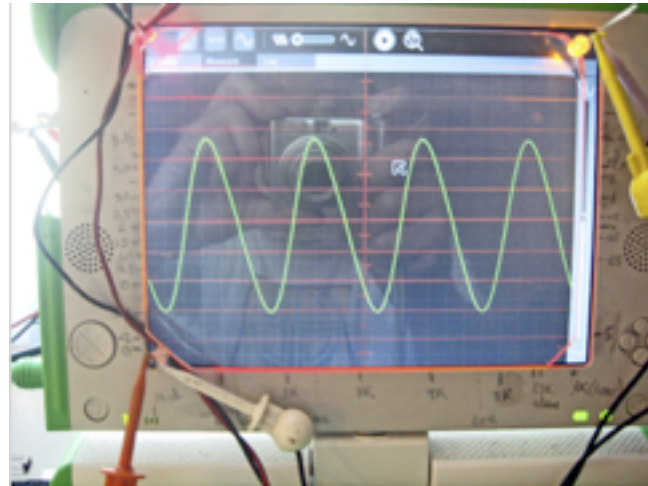


- Terminal

Measure Activity



Oscilloscope



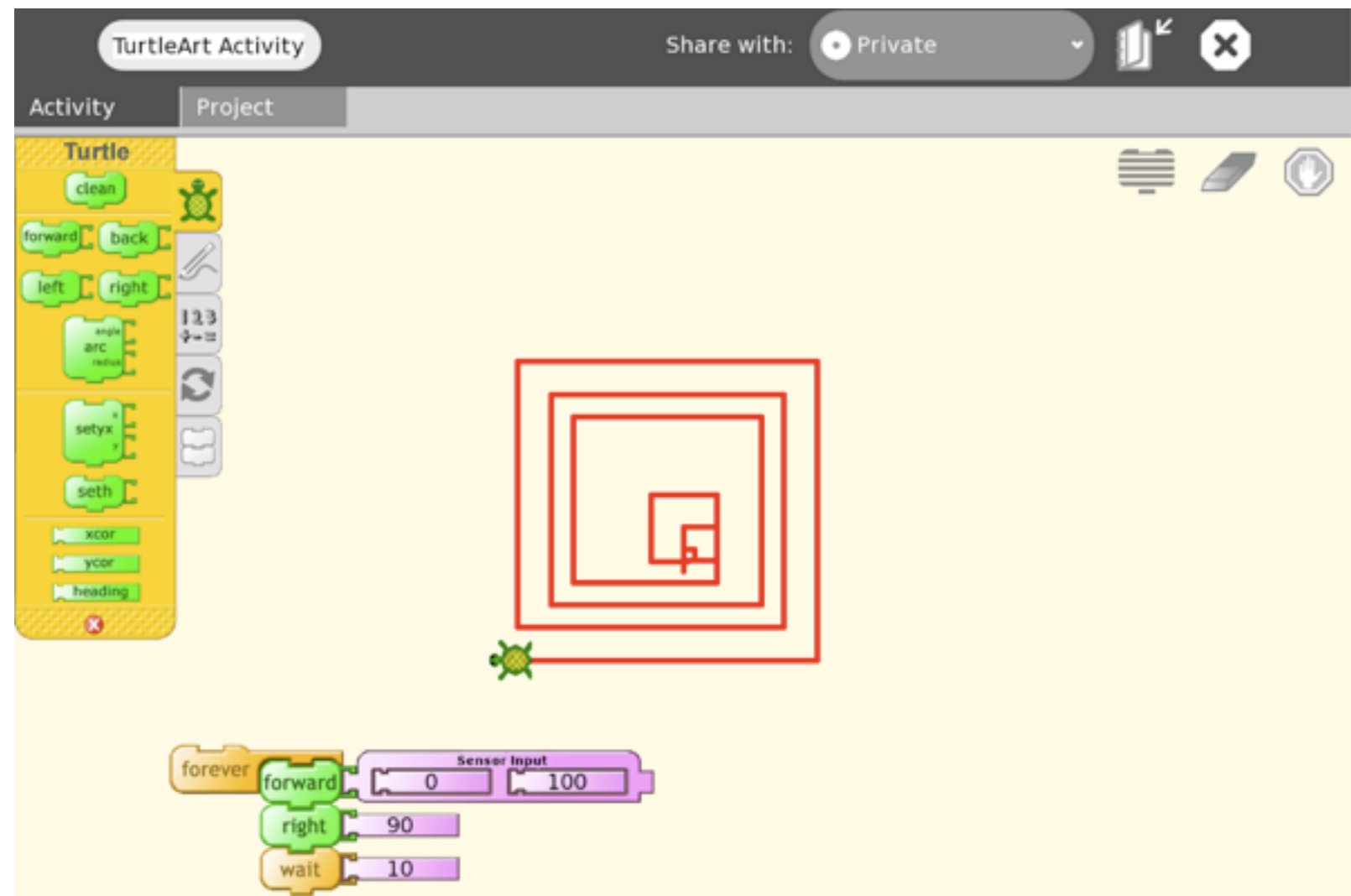
Electronic Tuning “Fork”



Temperature Sensor



Temperature Turtle Art



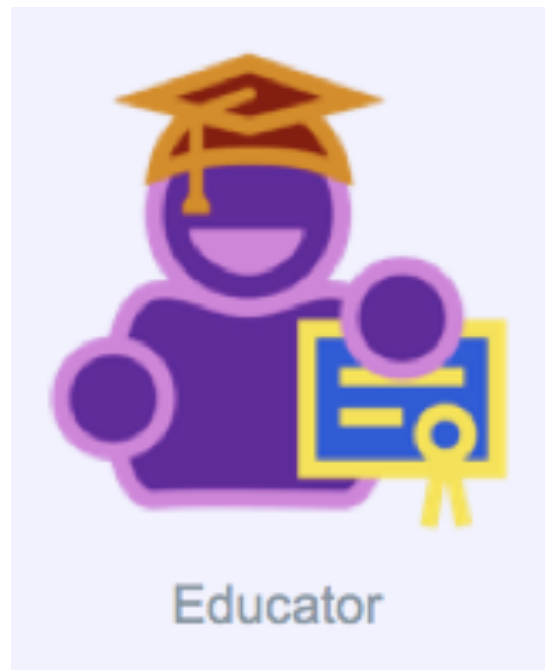
How To Contribute



START A PROJECT THAT WILL CHANGE KIDS' LIVES WORLDWIDE!



http://wiki.laptop.org/go/Contributors_program



Educators

Students

- Design Lesson Plans Using Sugar Activities
- Write Teacher Guides
- Write Textbook Templates for ebooks
- Provide Feedback for Software Developers
- Help Set Educational Goals
- Suggest New Educational Activities

Students

College and University

Grad and Undergrad

- Apply For Summer Programs Abroad

- OLPCorps Africa

- Application Deadline March 27, 2009

http://wiki.laptop.org/go/OLPCorps_Africa

- Summer Interns In Uruguay and Peru

- Application Deadline March 8, 2009

<http://wiki.laptop.org/go/Internships>

- Universities, Colleges, and High Schools

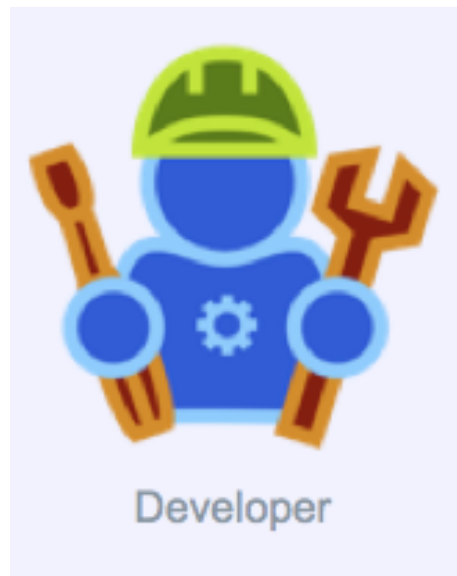
- Start A Campus Chapter

http://wiki.laptop.org/go/University_program



Translators

- Translate and “Localize” Activities
- Translate wiki Pages With the “Wiki Team”
- Translate Using Pootle
- Most Languages Needed



Developer

- Program in Python, C, GTK+
- File & Fix Bugs
- Design & Build Sugar & Activities
- Develop New Features
- Design New Peripherals
- “Sugarize” Existing Open-Source Programs

Cows and effect

Cows — and some creativity — drive a unique experiment launched by the One Laptop Per Child foundation

C Sujit Chandra Kumar
Mumbai

AT VILLAGE Khairat in Raigad district, about 40 km east of Navi Mumbai, the scene seems surreal. Just outside a one-classroom school set amid a cluster of huts, a teacher and 22 children carrying colourful laptops are conducting a unique experiment that makes a bullock cart stop in its tracks.

What I see is a contraption that connects the two wheel-rims of a motorcycle to the dynamo of an old Fiat car. The rims are connected by a belt and they act as pulleys. They are in turn attached to a cow that goes round, making them revolve. The other end is connected to a laptop.

A cow-powered laptop? Bizarre as that sounds, it is not hard to see why it works here, in village Khairat, where every household has a few cows and the villagers, who belong to a nomadic tribe, sell milk for a living. The idea came from Arjun Sarwal, a student of the Delhi Institute of Technology and volunteer with the One Laptop Per Child (OLPC) foundation. "In these remote villages, there is often no power for up to seven hours a day because of load-shedding. Solar panels are not cheap and generators have recurring costs. So we thought of this alternative source of energy. With one cow, we



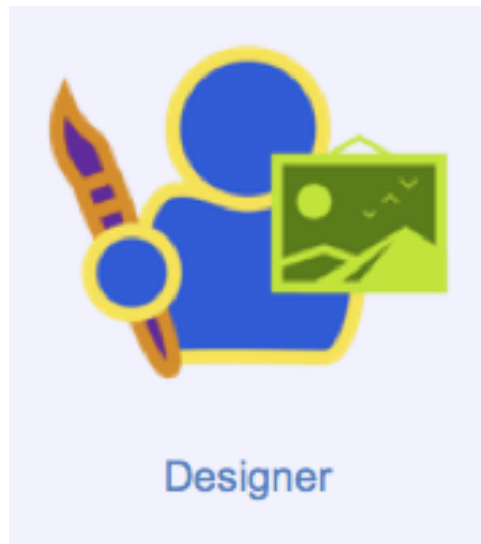
HEMANT PADALKAR/HT

VILLAGE ON THE M(O)OVE: The cow power experiment involves a cow which drives a dynamo that powers the laptop; (below) Sandeep Surve, the teacher, explains a concept to his students with the help of the XO laptops



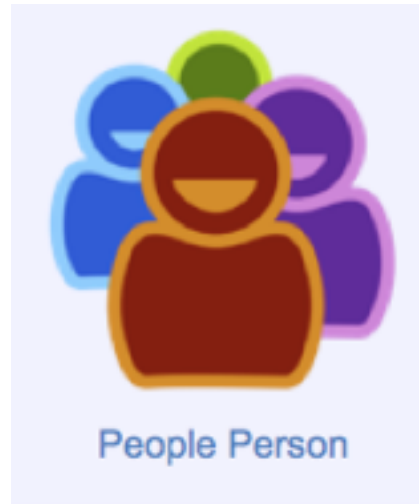
Content Writer

- Write A FLOSS Manual For Your Favorite Activity
- Write Lesson Plans
- Write Wiki Pages
- Write How-tos
- Write FAQs



Designer

- Sugar Art Work
- Activity Image Content
- User Interface Design
- Web Design
- Icons
- Design Mock-ups



People Person

- Help/Support Team
- Conferences
- Press Releases
- Local Events
- Sugar Labs Forum
- Cat Herding

The XO In Your District

- Due to Economy of Scale
 - New Orders need to be 10,000 or more
 - Districts can pool orders
- \$259 per laptop includes:
 - Spare parts, onsite assistance from OLPC staff
 - Online support
- Deployment Guide available online at:

http://wiki.laptop.org/go/Deployment_Guide

Sugar In Your Class



Run Sugar On The Computers You Already Have!



“Live” CD



“SoaS”: Sugar On A Stick
http://sugarlabs.org/go/Sugar_on_a_Stick

Contacts



help@laptop.org caryl@laptop.org

<http://wiki.laptop.org/go/Participate>

http://sugarlabs.org/go/Sugar_Labs/GettingInvolved

End Notes

- Want to try the XO? 5 laptops available for hands-on in the networking lounge at:
 - Thursday 2 pm to 4:30 pm
 - Friday 10 am to 12:30 am
 - Saturday Noon to 2 pm
- Interested in a Southern California grassroots LAXO-Sugar SIG? Sign-up on the CUE Community webpage for this presentation, email caryl@laptop.org, or do it the old-fashioned way and sign a paper list at one on my hands-on sessions.